NARCliM data and products

NARCliM is an initiative of the NSW Government to produce rigorous, regional scale climate model data as well as a wide range of downstream products. Using world-leading, best-practice methodology we deliver fit-for-purpose data and information products to meet various stakeholder needs. This enables end-users at all levels to access the information they require to better understand and respond to our changing climate. Here we highlight just a few of the products produced through this work.

NARCliM data

Following extensive stakeholder engagement and comprehensive research and analyses, NARCliM data are initially delivered to end-users as post-processed model outputs.

DATA END-USER   INTERESTED ① ② ③ ④ ⑤ EXPERT

SAMPLE USE   The model outputs are most appropriate for use by climate modellers and highly trained data scientists and consultants. The data can be used, for example, to develop detailed models for specific research or planning purposes, such as modelling natural hazards under climate change.

Climate variables

NARCliM data are further analysed to understand how climate change may influence various climatic conditions including extremes of temperature and precipitation (e.g. ET-SCI indices), and mean or maximum temperature (e.g. CORDEX indices). This information is currently in production and will be delivered as a collection of indices on the NSW Climate Data Portal and National Computing Infrastructure (NCI).

DATA END-USER   INTERESTED ① ② ③ ④ ⑤ EXPERT

SAMPLE USE   The ET-SCI (Expert Team on Sector-Specific Climate Indices) can be used to assess the socioeconomic impacts of climate extremes, such as the number of consecutive days at or above 35°C, under different greenhouse gas emissions scenarios or combined with other data to support decision-making in a range of sectors such as health or agriculture.

Peer-reviewed research

The NARCliM methodology as well as the performance and application of the data are explored and evaluated through the scientific peer-review process. The climate scientists who develop NARCliM as well as end-users have published in a range of international journals, pioneering new approaches and advancing the field of knowledge.

DATA END-USER   INTERESTED ① ② ③ ④ ⑤ EXPERT

SAMPLE USE   Scientists access the literature to build understanding of this research area including current state of knowledge, novel methodology and application.

AdaptNSW website

This NSW Government website provides relevant, localised information to inform and empower communities, businesses, households and government to adapt to climate change.

DATA END-USER   INTERESTED ① ② ③ ④ ⑤ EXPERT

SAMPLE USE   The public can access NSW Government's latest news, events, information and tools on climate adaptation. They can also explore future projected climate through the interactive climate change projections map and regional climate change snapshots, all developed from NARCliM2.0.

NSW regional climate change snapshots

NARCliM1.0 & 2.0 projections are available for NSW, the ACT and 10 NSW regions in summary format through snapshots. The snapshots summarise projections for core variables including temperature and average rainfall.

DATA END-USER   INTERESTED ① ② ③ ④ ⑤ EXPERT

SAMPLE USE   The snapshots can be used to understand climate change risks facing NSW and south-eastern Australia. Local decision makers can use this information in climate change risk assessments and future planning.

https://www.climatechange.environment.nsw.gov.au/narclim

NARCliM data outputs and downstream products that use NARCliM data target a range of audiences – from 'interested' to 'expert' end-user groups. The orange-coloured 'data end-user' maturity level (from 1 to 5) represents the typical minimum end-user level.